

Practice: 462 - Precision Land Forming**Scenario: #1 - Low Shaping****Scenario Description:**

The land surface is shaped or leveled to a specific elevation and grade for various land uses. Cuts and fills are small. The resource concerns are EXCESS / INSUFFICIENT WATER -(Ponding, Flooding) and SOIL EROSION -(Sheet, Rill)

Before Situation:

The field has minor topographic issues or problems with surface drainage or erosion which can be corrected without land leveling or land smoothing. Site conditions require attention to elevation and grade. Typical situation is a 40 acre field. Material to be moved and or placed typically is between 60 - 124 cubic yards per acre.

After Situation:

Land has been shaped to the required elevations and grades. Resource concerns have been treated. Associated practices, like plantings or drainage water management practices, would be contracted seperately as needed.

Scenario Feature Measure: Volume of Earth Moved

Scenario Unit: Acre

Scenario Typical Size: 40

Scenario Cost: \$6,947.28

Scenario Cost/Unit: \$173.68

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Tractor, agricultural, 360 HP	1205	Agricultural tractor with horsepower range of 340 to 390. Equipment and power unit costs. Labor not included.	Hour	\$138.20	36	\$4,975.20
Scraper, pull, 15 CY	1207	Pull type earthmoving scraper with 15 CY capacity. Does not include pulling equipment or labor. Add Tractor or Dozer, 260 HP typically required for single scraper.	Hour	\$19.56	36	\$704.16
Labor						
Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$22.16	36	\$797.76
Mobilization						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$235.08	2	\$470.16

Practice: 462 - Precision Land Forming**Scenario: #2 - Medium Shaping****Scenario Description:**

The land surface is shaped or leveled to a specific elevation and grade for various land uses. Cuts and fills are small. The resource concerns are EXCESS / INSUFFICIENT WATER -(Ponding, Flooding) and SOIL EROSION -(Sheet, Rill)

Before Situation:

The field has minor topographic issues or problems with surface drainage or erosion which can be corrected without land leveling or land smoothing. Site conditions require attention to elevation and grade. Typical situation is a 40 acre field. Material to be moved and or placed typically is between 125 - 200 cubic yards per acre.

After Situation:

Land has been shaped to the required elevations and grades. Resource concerns have been treated. Associated practices, like plantings or drainage water management practices, would be contracted separately as needed.

Scenario Feature Measure: Volume of Earth Moved

Scenario Unit: Acre

Scenario Typical Size: 40

Scenario Cost: \$9,106.32

Scenario Cost/Unit: \$227.66

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Tractor, agricultural, 360 HP	1205	Agricultural tractor with horsepower range of 340 to 390. Equipment and power unit costs. Labor not included.	Hour	\$138.20	48	\$6,633.60
Scraper, pull, 15 CY	1207	Pull type earthmoving scraper with 15 CY capacity. Does not include pulling equipment or labor. Add Tractor or Dozer, 260 HP typically required for single scraper.	Hour	\$19.56	48	\$938.88
Labor						
Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$22.16	48	\$1,063.68
Mobilization						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$235.08	2	\$470.16

Practice: 462 - Precision Land Forming**Scenario: #3 - High Shaping****Scenario Description:**

The land surface is shaped or leveled to a specific elevation and grade for various land uses. Cuts and fills are small. The resource concerns are EXCESS / INSUFFICIENT WATER -(Ponding, Flooding) and SOIL EROSION -(Sheet, Rill)

Before Situation:

The field has minor topographic issues or problems with surface drainage or erosion which can be corrected without land leveling or land smoothing. Site conditions require attention to elevation and grade. Typical situation is a 40 acre field. Material to be moved and or placed typically is between 201 - 250 cubic yards per acre.

After Situation:

Land has been shaped to the required elevations and grades. Resource concerns have been treated. Associated practices, like plantings or drainage water management practices, would be contracted seperately as needed.

Scenario Feature Measure: Volume of Earth Moved

Scenario Unit: Acre

Scenario Typical Size: 40

Scenario Cost: \$14,144.08

Scenario Cost/Unit: \$353.60

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Tractor, agricultural, 360 HP	1205	Agricultural tractor with horsepower range of 340 to 390. Equipment and power unit costs. Labor not included.	Hour	\$138.20	76	\$10,503.20
Scraper, pull, 15 CY	1207	Pull type earthmoving scraper with 15 CY capacity. Does not include pulling equipment or labor. Add Tractor or Dozer, 260 HP typically required for single scraper.	Hour	\$19.56	76	\$1,486.56
Labor						
Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$22.16	76	\$1,684.16
Mobilization						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$235.08	2	\$470.16

Practice: 462 - Precision Land Forming**Scenario: #4 - Site Stabilization****Scenario Description:**

The site contains a gully or other site specific topographic problem. Site conditions require attention to elevation and grade. Resource concerns are EXCESS / INSUFFICIENT WATER -(Ponding, Flooding) and SOIL EROSION -(Sheet, Rill)

Before Situation:

The site, commonly a crop field or CAFO, has localized gully or topographic issues causing drainage or erosion problems. Typical situation is a gully 10 feet wide and 5 feet deep.

After Situation:

Land has been shaped to the required elevations and grades. Resource concerns have been treated. Associated practices, like plantings or drainage water management practices, would be contracted separately as needed.

Scenario Feature Measure: Cubic yards of material placed

Scenario Unit: Cubic Yard

Scenario Typical Size: 6,000

Scenario Cost: \$10,985.68

Scenario Cost/Unit: \$1.83

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Excavation, Common Earth, side cast, small equipment	48	Bulk excavation and side casting of common earth with hydraulic excavator with less than 1 CY capacity. Includes equipment and labor.	Cubic yard	\$1.81	6000	\$10,860.00
Mobilization						
Mobilization, medium equipment	1139	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$125.68	1	\$125.68